APPROVED 10.G. FIG. CLASS SUECLASS DRAFTSMAN

> ${\tt TTTGGAAGCAGCCACTTCTGGTCCCCATCCCTGGAGCGATCGAGCGCAGGATCTGCTGTCCCAT}$ GGGACAGCAGATCTCTCTCCCAGTGCACAGCTTCTCCTCTGCCTGTTTTCCCTGCTTCCAGTG

 $\tt CTCCAGGTGGCCCAGGCCCCAGGACCAGCCCCTGTGGACACTTTTGGAGCAGT$ ${\tt ACTGCCACAGGACCACAATTGGGAATTTTTCAGGTCCCTACACCTACTGCAACACGACCTTGGA}$ CCTGGGCCTCAAGGGTCAACTACTCACACTGCGAACCCATTTTGGATGACAAGCAGAAAAGTA ${\tt TGACCTGCATTACCGAATCGCCCTCATTGTCAACTACCTGGGTCACTGTGTTTCCGTGGTGGCCC}$ ACTGGAACCTCATCACCACCTTCATTCTGAGAAACATCGCGTGGTTCCTGCTGCAACTCATCGA CCACGAAGTGCACGAGGGCAATGAGGTCTGGTGCCGCTGCATCACCACCATCTTCAACTATTTT GTGGTCACCAACTTCTTCTGGATGTTTGTGGAGGGCTGCTACCTGCACACGGCCATTGTCATGA ${\tt CGTACTCCACAGAGCACCTGCGCAAGTGGCTTTTCCTCTTCATTGGATGGTGCATTCCCTGCCC}$ ${\tt GAAGCTGGTGATTTGGTGGACTACATCTACCAGGGCCCCGTCATGCTTGTGCTGTTGATCAATT}$ ${\tt TTGTATTTCTGTTTAACATCGTCAGGATCCTGATGACGAAGTTACGAGCATCCACCACGTCCGA}$ GACAATCCAATACAGGAAGGCAGTGAAGGCCACGCTGGTCCTCCCCCCTGTTGGGCATCACC ${\tt TACATGCTCTTTGTCAATCCTGGCGAGGACGACCTGTCCCAGATTGTGTTCATCTACTTCA}$ ${\tt ACTCTTTCCTGCAGTCCTTCCAGGGTTTCTTTGTGTCCGTTTTCTACTGCTTCTTCAATGGAGA}$ ${\tt GGTGCGCGGGCCCTGAGAAAGCGGTGGCACTCGGGGCAGGACCACCACGCCCTCCGGGTGCCT}$ GTGCGCCGGGCCATGTCCATCCCTACGTCGCCCACCAGGATCAGCTTCCACAGCATCAAGCAGA ${\tt CAGCTGCTGTGACCCTCTGTCACCGTCTGCCCGGCAGTCCACCACTGAGGCAGCTTCTCCAT}$ CCTTTACAGCCTTCCCTGGGTCCTCCTTGCTACCCTGACCCACAGGTACAAGGTACAGGAGAA GGGAGGAGACGAACACTCCC (SEQ ID NO:1)

FIGURE 1



2/3

<u>underlined</u> = deleted in targeting construct

[] = sequence flanking Neo insert in targeting construct

CTCCTTTGGAAGCAGCCACTTCTGGTCCCCATCCCTGGAGCGATCGAGCGCAGGATCTGC TGTCCCATGGGACAGCAGATCTCTCTTCCCAGTGCACAGCTTCTCCTCTGCCTGTTTTTCC ACACTTTTGGAGCAGTACTGCCACAGGACCACAATTGGGAATTTTTCAGGTCCCTACACC TACTGCAACACGACCTTGGACCAGATCGGGACCTGCTGGCCACAGAGCGCACCCGGAGCC CTAGTAGAGAGACCGTGCCCGAGTACTTCAATGGCATCAAGTACAACACGACCC [GGAA TGCCTACAGAGAGTGCCTGGA]GAACGGGACCTGGGCCTCAAGGGTCAACTACTCACACT GCGAACCCATTTTGGATGACAAGCAGAGAAAGTATGACCTGCATTACCGAATCGCCCTCA TTGTCAACTACCTGGGTCACTGTGTTTCCGTGGTGGCCCTGGTG [GCCGCTTTCCTGCTT TTCCTAGTGCTGCG]GAGTATCCGCTGCCTGAGGAATGTGATCCACTGGAACCTCATCAC CACCTTCATTCTGAGAAACATCGCGTGGTTCCTGCTGCAACTCATCGACCACGAAGTGCA CGAGGCCATGAGGTCTGGTGCCGCTGCATCACCACCATCTTCAACTATTTTGTGGTCAC CAACTTCTTCTGGATGTTTTGTGGAGGGCTGCTACCTGCACACGGCCATTGTCATGACGTA CTCCACAGAGCACCTGCGCAAGTGGCTTTTCCTCTTCATTGGATGGTGCATTCCCTGCCC TATCATCATCGCCTGGGCAGTTGGCAAACTCTACTATGAGAATGAGCAGTGCTGGTTTGG CAAGGAAGCTGGTGATTTGGTGGACTACATCTACCAGGGCCCCGTCATGCTTGTGCTGTT GATCAATTTTGTATTTCTGTTTAACATCGTCAGGATCCTGATGACGAAGTTACGAGCATC CACCACGTCCGAGACAATCCAATACAGGAAGGCAGTGAAGGCCACGCTGGTCCTCCCC CCTGTTGGGCATCACCTACATGCTCTTCTTTGTCAATCCTGGCGAGGACGACCTGTCCCA GATTGTGTTCATCTACTTCAACTCTTTCCTGCAGTCCTTCCAGGGTTTCTTTGTGTCCGT TTTCTACTGCTTCTTCAATGGAGAGGTGCGCGCGCCCTGAGAAAGCGGTGGCACTCGGG GCAGGACCACCACGCCTCCGGGTGCCTGTGCGCCGGGCCATGTCCATCCCTACGTCGCC CACCAGGATCAGCTTCCACAGCATCAAGCAGACAGCTGCTGTGTGACCCTCTGTCACCGT CTGCCCGGCAGTCCACCACTGAGGCAGCTTCTCCATCCTTTACAGCCTTCCCCTGGGTCC

FIGURE 2A







441 bp

Sequence Deleted

582 bp

Size of full-length

cDNA: 1557 bp

Targeting Vector* (genomic sequence)

Construct Number: 3050

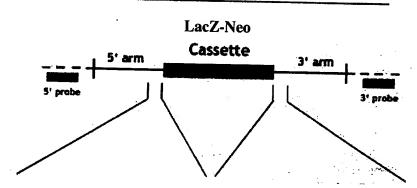
Arm Length: 5': 3.1 kb

3': 2.5 kb

doanoron coeco

Targeting Vector - Endogenous Locus

* Not drawn to scale



5'>AGCCCTATGTGTAATTTTCAT ATAAATGACTCATATTAGCTTTCA GATATGCATTGTGTTTTCAGGTCT GGGAGAACTAAGGAGTGTGGACCT TATCCTGCAGGTACTAGGGAGCCA GGGAGGGCTTTTGAGGCGGGAGGG CGTCCTGACTCTCAGTGGTTGGCA TCTTCTCTAGGGAATGCCTACAGA GAGTGCCTGGA<3' (SEQ ID NO:2)

5'>GCCGCTTTCCTGCTTTTCCTA GTGCTGCGGTGAGTCCACCTCCAC CCTGCTTCCTCCTTGTCTTTGCCT CTCCCAGACATTGTCTCTTCCATT CTGGGGCCCCGGGAACAGTAGCCA GAAGTGGGTTTAAGTCAGACCCCC AGGGCCATGACCACCAGCCTGCCT GAAGGGTAGAGAGCCAAGCT GGGACCACCAG<3 (SEQ ID NO:3)

FIGURE 2B